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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
087769,694	12/18/96	MURRAY	L 2685/4002

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EXAMINER	
DOWNS, R	
ART UNIT	PAPER NUMBER
2762	7

DATE MAILED: 03/02/98

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

*Final office action*

# Office Action Summary

Application No.  
**08/769,694**

Applicant(s)  
**MURRAY ET AL.**

Examiner  
**ROBERT W. DOWNS**

Group Art Unit  
**2762**



☒ Responsive to communication(s) filed on Jan 13, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-31 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☒ Claim(s) 1-23 and 27-31 is/are allowed.

☒ Claim(s) 24 is/are rejected.

☒ Claim(s) 25 and 26 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2309

1. The rejection of Claims 24-30 under 35 U.S.C. 112, second paragraph, is **withdrawn**.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The rejection of Claims 1-3, 12-15, 24-26, and 31 under 35 U.S.C. 102(b) as being anticipated by Derr et al., U.S. Patent No. 4,891,766 (Derr) is **withdrawn**. The Examiner agrees that Derr does not teach checking whether a new rule conflicts with an existing rule.

4. The rejection of Claims 4 and 16 under 35 U.S.C. 103(a) is **withdrawn**.

5. Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by T.A. Nguyen, et al., "Checking an Expert Systems Knowledge Base for Consistency and Completeness," August 1985 (Nguyen).

Nguyen describes a program that verifies the consistency of expert system knowledge bases (see section 2.1 "Potential Problems in a Knowledge Base", and section 3.0 "Implementation of Rule Checker"); a complete expert system, i.e. the knowledge base plus the inference engine, constitute a personal software agent.

Art Unit: 2309

As per claim 24, Nguyen teaches an apparatus for automatically verifying whether a new rule which is to be added to a set of rules to control a personal software agent is valid with respect to the set of rules comprising a stored subsumption hierarchy of the rules (a knowledge base of rules, including some subsumed rules), means for placing a new rule to control the personal software agent in the subsumption hierarchy (allows for the knowledge engineer to add rules to the rule base; see section 2.3 "Dependency Chart and Circular-Rule Chains Detection"), means for using the subsumption hierarchy which includes the new rule to determine whether the new rule conflicts with another rule in the hierarchy and provide an indication when a conflict exists (the CHECK algorithm).

6. Claims 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 1-23 and 27-31 are allowed. Nguyen does not teach the function of suggesting repairs to the rule if the rule conflicts with another rule.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2309

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Downs whose telephone number is (703) 305-9642.

RWD  
February 23, 1998



**ROBERT W. DOWNS  
PRIMARY EXAMINER**